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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,357

10/20/2005

Philippe Pardo

26214

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22889

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12/04/2008

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EXAMINER

PARKER, FREDERICK JOHN

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/538,357	<b>Applicant(s)</b> PARDO ET AL.	
	<b>Examiner</b> Frederick J. Parker	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Amendment***

***Claim Rejections - 35 USC § 112***

The amendments in response to the 35 USC 112 rejections of the Previous Office Action are acknowledged and appreciated, and the Examiner withdraws the rejections.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,2,4,6 are rejected under 35 U.S.C. 102(b) as being anticipated by Sprengling US 4496415.

Sprengling teaches a method for forming “composite” sheets comprising providing a continuous sheet (= mat) fibrous substrate 2 (cited as wovens , fabrics of cotton, polyester, glass (claim 6) , etc col. 3, 34-37 and elsewhere) by “depositing” it onto sheet 1 (=substrate) ; applying an organic dry resin powder 7; applying heat and pressure (“compressed”) to cause the resin to flow into the fibrous materials to wet and adhere the fibers; inherently cooling the product to provide an end-product with utility and which is also cut as desired via means 32 to form products 33, inherently in sheet form given the process (col. 5, 3-53). Thus the reference meets all limitations of claim 1.

Thermoset resins including epoxy are cited (col. 3, 46; top col. 4; etc) per claims 2,4.

***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 5,7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprengling.

Sprengling is cited for the same reasons previously discussed, which are incorporated herein. Per claims 5,7,9 ; the amount and types of reinforcing material, and coating layer thickness or amount applied would obviously have been dependant upon the end-use, with optimization determined by routine experimentation. Per claim 10, it is apparent the stacking of fibrous structures to form the laminate constitutes the “at least one intermediate structure” of claim 10 since one layer would be intermediate plural of other layers. The product structure comprises fibrous layers and organic films therein and in between per claim 11. The selection of suitable amounts of each ingredient in a formulation is deemed obvious optimization, In re Peterson 65 USPQ2d 1379.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Sprengling by optimizing amount and types of reinforcing material, and coating layer thickness or amount applied, and other obvious parameters to form a desired end product.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sprengling in view of Haggquist US 6998155.

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Sprengling is cited for the same reasons previously discussed, which are incorporated herein. While thermoset resins are explicitly cited and exemplified, thermoplastic resins are not. It is the Examiner's position that the use of any resin to act as the desired function of the resins of Sprengling would have been an obvious modification within the purview of one skilled in the art. Nonetheless Haggquist is cited because it teaches a similar concept of applying resin particles into a continuous woven material which is subsequently fixed. As apparent from the laundry list on col. 7- bridging 8, either thermoplastic or thermoset particles can be successfully applied and establishing an equivalence that either may be employed for application to wovens, sheets, yarns, etc (col. 3, 17-22). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Sprengling by incorporating thermoset or thermoplastic particles given the equivalence of use disclosed by Haggquist because of the expectation of achieving successful and predictable end results.

### ***Response to Arguments***

Applicant's arguments have been considered.

Following a repeat of the Examiner's position, Applicants argue Sprengling does not cite "a web of yarns...". This is puzzling because Applicants claim 1 defines "a web of yarns" as a "mat of continuous yarns, a woven, a knit or an assembly of continuous non-interlaced yarns".

Sprengling teaches using fibrous materials which may be laid on one-another including cotton and polyester fabrics which are defined to explicitly include both woven and unwoven materials.

See col. 3, 34-40 & figure. Thus at least a "woven" is common to both the reference and claim 1. Applicants argument that Sprengling uses the term "sheet" whereas the claim states "web" is a matter of language because one of ordinary skill reading Sprengling and looking at the figure

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would understand that the “sheets” referred to are continuous webs driven by reels 4,5 as opposed to sheets in the form of cut pieces which Applicants appear to suggest. A cotton or polyester yarn is both organic and contains reinforcing fibers within the weave. That is all that is required by Applicants' claim as written.

While Sprengling ultimately laminates the sheets, the steps nonetheless read on Applicants' broad claim 1; further Applicants claims do not prohibit lamination, and laminated sheets would conventionally be “composites” as would have been apparent to one of ordinary skill.

Applicants' argument on top of page 6 asserting that the organic material of the web forms the matrix of the composite sheets is a specific structure not present in claim 1, and its being cited in the specification does not mean it can be brought into claim interpretation without express basis. Although claims are read in light of the specification, this is different from reading limitations into a claim having no express basis in the claim in order to narrow the scope of that claim, In re Parter 162 USPQ 541. Thus the argument is not persuasive. If Applicants intend a specific structure, then it needs to be properly claimed.

Applicants' argument regarding difference in purpose for applying the powder is not persuasive because the claims fail to prohibit other uses and because the reference reads on the claims as written.

As to the arguments regarding the 35 USC 103 rejections, following a review of the Examiner's positions, Applicants repeat the argument that Sprengling begins with a different material; the response above is incorporated and will not be repeated for brevity.

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Glass fabric sheets are taught by Sprengling without limitation (col. 3, 38) and would have included specific glass fabrics, absent a clear and convincing showing that the claimed glass fabric of claim 7 provides unexpected or synergistic results which impart patentability.

As to the 4<sup>th</sup> full paragraph of page 7, clearly a coating/ layer must be applied to the “sheets” of Sprengling, with thickness be an obvious process parameter apparent to one skilled in the art to provide a desired en-use product. If Applicants thicknesses provide some unexpected or synergistic results which impart patentability, then it should be pointed out or evidence provided.

Beginning page 10, following a review of the Examiner’s positions, Applicants repeat the argument that the resin powder coatings of Sprengling and Applicants have different functions; the response above is incorporated and will not be repeated for brevity. Applicants also argue Haggquist teaches the powder applied is for binding particulates and not coating. The concept of applying a thermoset or thermoplastic powder to a woven or other fabric is taught. Sprengling teaches to apply thermoset resins but doesn’t mention thermoplastics. Haggquist is simply an explicit teaching of the concept of applying either to such a fabric type substrate. No explicit reasons as to why the application of a thermoplastic would have patentably distinguished over the prior art are provided. The rejection also notes that it was the Examiner’s position that the use of any resin to act as the desired function of the resins of Sprengling would have been an obvious modification within the purview of one skilled in the art. This was not contested in Applicants’ remarks.

It remains the Examiner’s position that the prior art reads on Applicants’ claims. Applicants cannot read specific limitations into the claims without express basis in order to narrow claim

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scope and overcome the prior art. Finally Applicants arguments are simply not persuasive as to why the instant claims patentably distinguish over the prior art.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Frederick J. Parker  
Primary Examiner  
Art Unit 1792

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